

i500 Digital Projector Personal Smart Series User Manual



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BenQ warrants this product against any defects in material and workmanship, under normal usage and storage.

Proof of purchase date will be required with any warranty claim. In the event this product is found to be defective within the warranty period, BenQ's only obligation and your exclusive remedy shall be replacement of any defective parts (labor included). To obtain warranty service, immediately notify the dealer from which you purchased the product of any defects.

Important: The above warranty shall be void if the customer fails to operate the product in accordance with BenQ's written instructions, especially the ambient humidity must be in-between 10% and 90%, temperature in-between 0°C and 35°C, altitude lower than 3000 meters, and avoiding to operate the projector in a dusty environment. This warranty gives you specific legal rights, and you may have other rights which vary from country to country.

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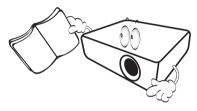
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Important safety instructions

Your projector is designed and tested to meet the latest standards for safety of information technology equipment. However, to ensure safe use of this product, it is important that you follow the instructions mentioned in this manual and marked on the product.

1. Please read this user manual before you operate your projector. Keep this manual in a safe place for future reference.



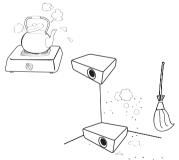
- 2. Always place the projector on a level, horizontal surface during operation.
 - Do not place the projector on an unstable cart, stand, or table as it may fall and be damaged.
 - Do not place inflammables near the projector.
 - Do not use if tilted at an angle of more than 10 degrees left to right, nor at angle of more than 15 degrees front to back.



3. Do not store the projector on end vertically. Doing so may cause the projector to fall over, causing injury or resulting in damage.



- 4. Do not place the projector in any of the following environments:
 - Space that is poorly ventilated or confined. Allow at least 50 cm clearance from walls and free flow of air around the projector.
 - Locations where temperatures may become excessively high, such as the inside of a car with all windows closed.
 - Locations where excessive humidity, dust, or cigarette smoke may contaminate optical components, shorten the projector's lifespan and darken the screen.



- Locations near fire alarms.
- Locations with an ambient temperature above 35°C/95°F.

- Locations where the altitudes are higher than 3000 m (10000 feet).



- 5. Do not block the vents holes while the projector is on (even in standby mode).
 - Do not cover the projector with any item.
 - Do not place the projector on a blanket, bedding or any other soft surface.



6. In areas where the mains power supply voltage may fluctuate by ±10 volts, it is recommended that you connect the projector through a power stabilizer, surge protector or uninterruptible power supply (UPS) as appropriate to your situation.



7. Do not step on the projector or place any objects upon it.



8. Do not place liquids near or on the projector. Liquids spilled into the projector will void your warranty. If the projector does become wet, disconnect it from the power point and call BenQ to have the projector repaired.



9. Do not look straight into the projector lens during operation. It may harm your sight.



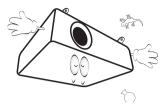
10. Do not operate the projector lamp beyond the rated lamp life. Excessive operation of lamps beyond the rated life could cause a lamp to break on rare occasions.



11. The lamp becomes extremely hot during operation. Allow the projector to cool for approximately 45 minutes prior to removing the lamp assembly for replacement.



12. This projector is capable of displaying inverted images for ceiling installation.



13. Do not attempt to disassemble this projector. There are dangerous high voltages inside which may cause death if you should come into contact with live parts.

Under no circumstances should you ever undo or remove any other covers. Refer servicing only to suitably qualified professional service personnel.



- Please keep the original packing for possible future shipment. If you need to pack your projector after use, adjust the projection lens to an appropriate position, put the lens cushion around the lens, and fit the lens cushion and projector cushion together to prevent damage during transportation.
- 14. When you think service or repair is required, take the projector only to a suitably qualified technician.



Moisture condensation

Never operate the projector immediately after moving it from a cold location to a hot location. When the projector is exposed to such a change in temperature, moisture may condense on the crucial internal parts. To prevent the projector from possible damage, do not use the projector for at least 2 hours when there is a sudden change in temperature.

Avoid volatile liquids

Do not use volatile liquids, such as insecticide or certain types of cleaner, near the projector. Do not have rubber or plastic products touching the projector for a long time. They will leave marks on the finish. If cleaning with a chemically treated cloth, be sure to follow the cleaning product's safety instructions.

Disposal

This product contains the following materials which are harmful to human bodies and environment.

- · Lead, which is contained in solder.
- Mercury, which is used in the lamp.

To dispose of the product or used lamps, consult your local environment authorities for regulations.

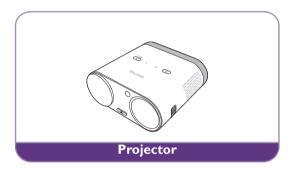


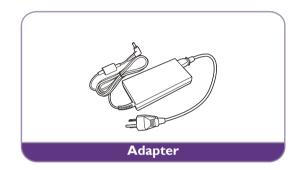
The illustrations and the images shown in this document are for your reference. The actual content may vary by the product supplied for your region.

Package contents

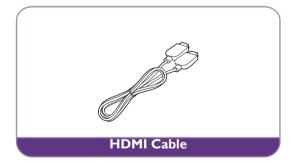
Carefully unpack and verify that you have the items below. Some of the items may not be available depending on your region of purchase. Please check with your place of purchase.

Standard accessories















- Some of the accessories may vary from region to region.
- The warranty card is only supplied in some specific regions. Please consult your dealer for detailed information.

Introduction

Projector features

Full HD compatible

The projector is compatible with Standard Definition TV (SDTV) 480i, Enhanced Definition television (EDTV) 480p, 576i, 576p and High Definition TV (HDTV) 720p, 1080i/p 60Hz formats, with the 1080p format providing clear image reproduction.

Good picture quality

The projector provides excellent picture quality due to its resolution, 500 lm brightness, high contrast ratio, vivid color and rich gray-scale reproduction.

Built-in Bluetooth speakers

The two built-in 5W chamber speakers feature the capability of wirelessly connecting to any Bluetooth-enabled device media player to broadcast any music played by the device.

WLAN capabilities

The projector is able to connect to any WLAN access point to access the internet and utilize streaming apps.

Wide variety of inputs and video formats

The projector supports a wide variety of inputs for connection to your video, computer, and smart equipment, including personal computer (both Mac and PC) and HDMI source.

Convenient Android-based BenQ Launcher

The projector operates using the Android-based **BenQ Launcher** which complemented by a WLAN connection allows you to project/broadcast media via embedded or downloaded streaming apps.

Advanced LED light source

The projector features a long lasting LED lightbulb that provides a longer lifespan than traditional bulbs.

Short throw lens

The projector provides a roughly 80" display from a I meter distance, that makes it extremely suitable for areas with limited space such as a study, bedroom, or small apartment.

High brightness

The projector features super high brightness to achieve excellent picture quality in ambient light conditions, outperforming ordinary projectors.

Vivid color reproduction

The projector features the capability of representing 1.07 billion colors.

Auto Keystone

The projector offers an automatic keystone adjustment function which adjusts the projected image accordingly.

• 3D function

To enjoy the 3D movies, videos, and sporting events in a more realistic way by presenting the depth of the images through HDMI.

Media playback from USB storage devices

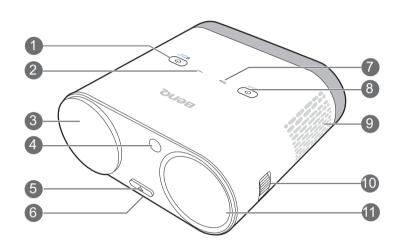
The projector supports playing of media including multiple video and music file formats that are located on any USB storage devices connected to the USB port on the projector.

Portability

The projector is small and light, making it useful for business trips and leisure activities. You can view documents, videos and photos anywhere.

Projector exterior view

Front and upper side view



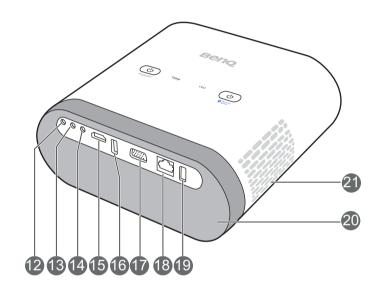
- I. Bluetooth button (See Control panel on page 17 for details.)
- 2. LED indicator light
- 3. Lens cap holder

This magnetic component holds the lens cap while the projector is in use.

- 4. Front IR sensor
- 5. Quick-release button
- 6. Quick-release adjuster foot (located underneath the projector)
- 7. TEMPerature indicator light
- 8. Power button
- 9. Vent (cool air intake)
- 10. Focus ring
- II. Projection lens

Rear and upper side view

See Connection on page 26 for connection details.



The image above features the rear view with the IO port cover removed. For ease of use when removing the magnetic IO port you can place it on the speaker grill as a temporary holding place.

- 12. Microphone in jack
- 13. Audio input jack
- 14. Audio output jack
- 15. HDMI port

This port can also be used for charging the connected HDMI compatible smart device as long as the power is fed to the projector.

16. USB 3.0 Type-A port

Used to connect a USB storage device to project/broadcast media stored on the device. You may also connect a wireless keyboard/mouse via this USB port.

This USB port also allows you to charge attached USB-enabled devices (i.e. a smartphone, tablet, etc.).

17. RGB (PC)/Component video (YPbPr/YCbCr) signal input jack

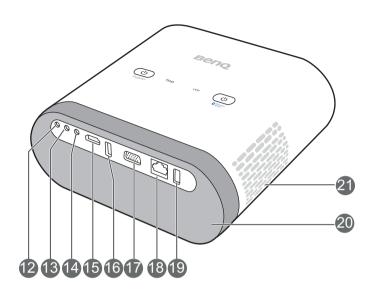
18. LAN RJ-45 Port

Used to connect the projector to LAN port on an internet access port for internet access.

19. USB 2.0 Type-A port

Used to connect a USB storage device to project/broadcast media stored on the device. You may also connect a wireless keyboard/mouse via this USB port.

This USB port also allows you to charge attached USB-enabled devices (i.e. a smartphone, tablet, etc.).



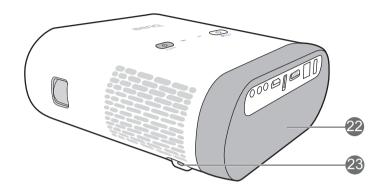
20. Speaker Grill

Inside the speaker grill is the two 5-watt chamber speakers.

21. Vent (cool air intake)

The image above features the rear view with the IO port cover removed. For ease of use when removing the magnetic IO port you can place it on the speaker grill as a temporary holding place.

Rear and left side view



The image above features the rear view with the IO port cover removed. For ease of use when removing the magnetic IO port you can place it on the speaker grill as a temporary holding place.

22. Rear IR sensor

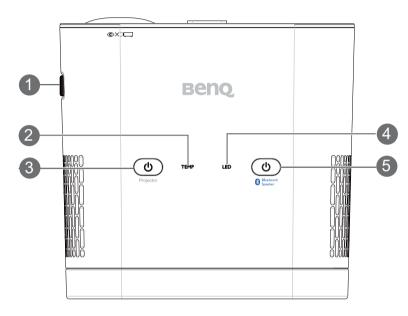
23. Rear power jack



Please only use the supplied power adapter to avoid possible dangers such as electric shock and fire.

Controls and functions

Control panel



I. Focus ring

Adjusts the focus of the projected image.

2. TEMPerature warning light

Lights up red if the projector's temperature becomes too high. See Indicators on page 63 for more details.

3. (1) POWER

Toggles the projector between standby mode and on. The icon on the Power button also acts as the power indicator light. See Starting up the projector on page 31 and Indicators on page 63 for more details.

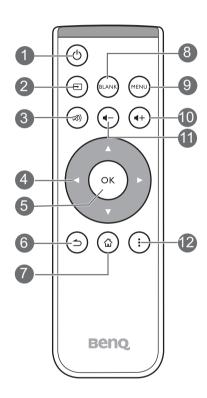
4. LED indicator light

Indicates the system or error status of the projector. See Indicators on page 63 for more details.

5. Bluetooth button

Activates Bluetooth for the projector's wireless speakers. The icon on the Bluetooth button also acts as the Bluetooth indicator light. See The Bluetooth speaker on page 41 and Indicators on page 63 for more details.

Remote control



I. (1) Power

Toggles the projector between on and off mode.

2. **■** Source

Launches the Source On-Screen Display (OSD) menu (the source menu will automatically close after 30 seconds of inactivity).

3. ⋈ Mute

Toggles projector audio between on and off.

4. Arrow keys (∢Left, ▶Right, ▲Up, ▼Down)

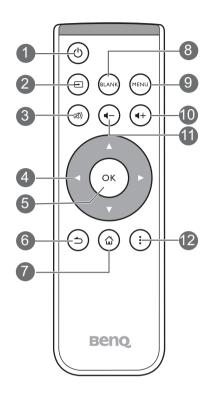
- When the OSD menu is activated, these keys are used as directional arrows to select the desired menu items and to make adjustments.
- When the OSD menu is off and you are under the **BenQ Launcher** mode, these keys are used as directional arrows to select the desired menu items and to make adjustments.

5. OK

- Confirms the selected OSD menu item.
- When the OSD menu is off and you are under **BenQ Launcher** mode, use the key to confirm the selection on the **BenQ Launcher** menu.

6. ⇒ BACK

- Goes back to previous OSD menu, exits and saves menu settings.
- When the OSD menu is off and you are under **BenQ Launcher** mode, use the key to return to the previous layer.



7. ☆ HOME

Press this key to enter the home menu of the **BenQ Launcher** mode.

Ø.

This key is only available when the projector is under **BenQ Launcher** mode.

8. BLANK

Switches the projected image to either a blank screen or switches the blank screen back to the original projected image.

9. MENU

Opens the projectors OSD menu.

Increases the projector volume.

II. ← Volume Down

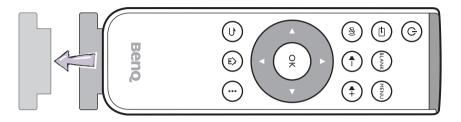
Decreases the projector volume.

12. : Options

Launches the contextual options menu for various pages under **BenQ Launcher** mode.

Activating the remote control batteries

1. Pull out the plastic battery shield between the battery contacts on your remote control and the battery, as illustrated.





- Avoid leaving the remote control and battery in an excessive heat or humid environment like the kitchen, bathroom, sauna, sunroom or in a closed car.
- Replace only with the same or equivalent type recommended by the battery manufacturer.
- · Dispose of the used batteries according to the manufacturer's instructions and local environment regulations for your region.
- Never throw the battery into a fire. There may be danger of an explosion.
- If the battery is drained or if you will not be using the remote control for an extended period of time, remove the battery to avoid damage to the remote control from possible battery leakage.

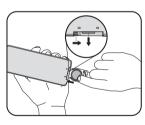
Replacing the remote control battery

- I. Push and hold the locking arm while pulling out the battery holder.
- 2. Insert the new battery in the holder. Note that the positive side of the battery should face outward.
- 3. Push the holder into the remote control.

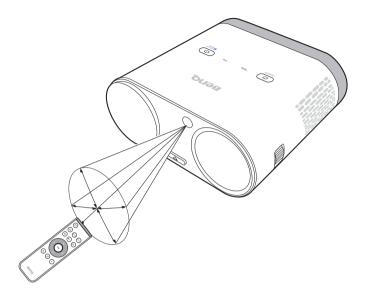


The remote control must be held at an angle within 15 degrees perpendicular to the projector's IR remote control sensor(s) to function correctly. The distance between the remote control and the sensor(s) should not exceed 7 meters (~ 23 feet).

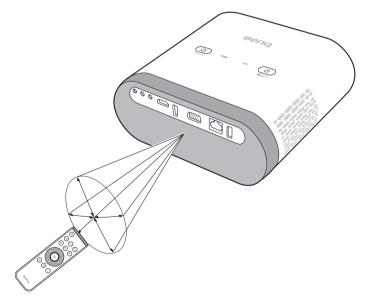
Make sure that there are no obstacles between the remote control and the IR sensor(s) on the projector.



• Operating the projector from the front



Operating the projector from the rear



Installation

Choosing a location

Before choosing an installation location for your projector, take the following factors into consideration:

- Size and position of your screen
- Electrical outlet location
- Location and distance between the projector and the rest of your equipment
- Location and distance between the projector and the wireless access point, or if using a LAN cable, the internet hub.

You can install your projector in the following ways.

Ι.	Front:	
	Select this location with the projector placed near the floor in front of the screen.	
	This is the most common way to position the projector for quick setup and portability.	
	Turn on the projector and make the following settings:	
	MENU > Settings > Projector Position > Front	
2	Rear:	
	Select this location with the projector placed near the floor behind the screen.	
	Turn on the projector and make the following settings:	
	MENU > Settings > Projector Position > Rear	
	A special rear projection screen is required.	

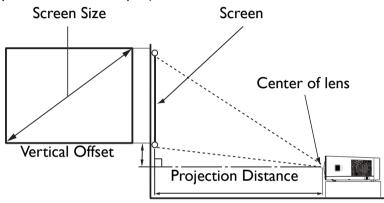
3.	Select this location with the projector elevated near the ceiling in front of the screen.	
	Turn on the projector and make the following settings:	
	MENU > Settings > Projector Position > Front Ceiling	
	The projector does not feature ceiling mount components/equipment so when choosing to use a front ceiling location you must place it on an elevated location of your choice.	
4.	Rear Ceiling:	
	Select this location with the projector elevated from the ceiling behind the screen.	
	Turn on the projector and make the following settings:	
	MENU > Settings > Projector Position > Rear Ceiling	
	A special rear projection screen is required.	
	The projector does not feature ceiling mount components/equipment so when choosing to use a front ceiling location you must place it on an elevated location of your choice.	

Obtaining a preferred projected image size

The projected image size is determined by the distance from the projector lens to the screen, and the video format.

Projection dimensions

Use the illustration and tables below to help you determine the projection distance.



Screen size				Projector distance (mm)	
Diagonal		H (mm)	W (mm)	Average	Max. distance
Inch	mm	ri (min)	** (11111)	Average	Tiax. distance
60	1524	808	1292	388	775
70	1778	942	1508	452	905
80	2032	1077	1723	517	1034
90	2286	1212	1939	582	1163
100	2540	1346	2154	646	1292
120	3048	1615	2585	775	1551

Screen size				Projector distance (mm)	
Diagonal		H (mm) W (mm)	W (mm)	Average	Max. distance
Inch	mm	11 (11111)	** (111111)	Average	r iax. distance
140	3556	1885	3015	905	1809
160	4064	2154	3446	1034	2068
180	4572	2423	3877	1163	2326
200	5080	2692	4308	1292	2585

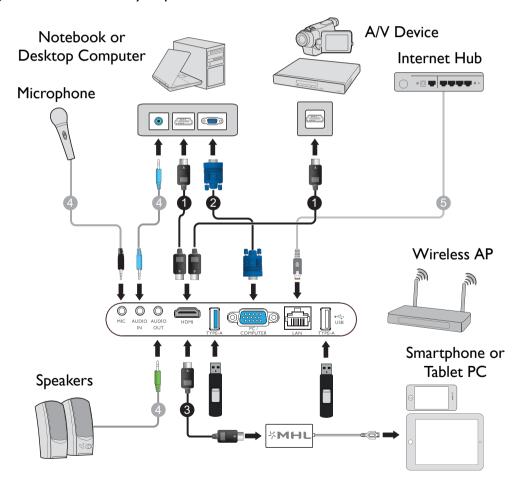


All measurements are approximate and may vary from the actual sizes. If you want a permanent installation of the projector, we recommend that you use the actual projector to physically test the projection size, distance, and the projector's optical characteristics prior to the installation. This helps you determine the exact mounting position which best suits your installation.

Connection

When connecting a signal source to the projector, be sure to:

- I. Turn all equipment off before making any connections.
- 2. Use the correct signal cables for each source.
- 3. Make sure the cables are firmly inserted.
- 4. Place the projector within range of the wireless AP you plan to connect it to.





- In the connection illustrations shown above, some cables may not be included with the projector (see Projector exterior view on page 13). They are commercially available from electronics stores.
- The illustrations above are for reference only. The rear connecting jacks available on the projector vary with each projector model.
- I. HDMI cable
- 2. VGA cable
- 3. HDMI to Micro USB cable
- 4. Audio 3.5" cable
- 5. LAN RJ-45 cable

Connecting with video equipment

You only need to connect the projector to a video source device using just one of the following connecting methods. Each video source provides different picture quality. The method you choose most likely depends upon the availability of matching terminals on both the projector and the video source device as described below:

Terminal name	Terminal appearance	Reference	Picture quality
НДМІ		Connecting HDMI devicesConnecting smart devices	Best
PC (D-SUB)		Connecting a computer	Better

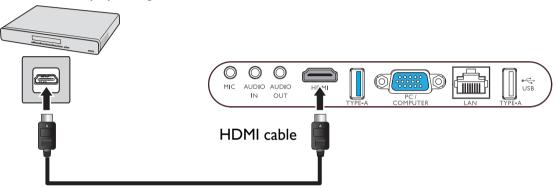


In the connection illustrations shown below, some cables may not be included with the projector (see Projector exterior view on page 13). They are commercially available from electronics stores.

Connecting HDMI devices

HDMI (High-Definition Multimedia Interface) supports uncompressed video data transmission between compatible devices like DTV tuners, DVD players, Blu-ray players and displays over a single cable. You should use an HDMI cable when making a connection between the projector and HDMI devices.

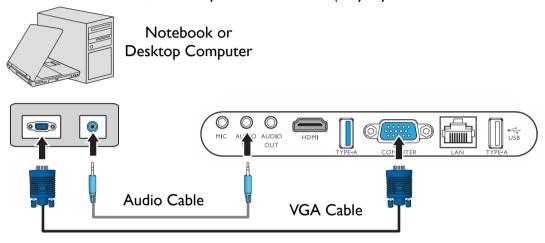
HDMI device: DVD player, digital tuner, etc.



Connecting with a computer

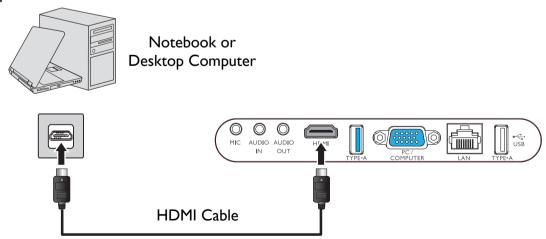
Using a VGA cable

Connect the projector to a computer with a VGA cable, and a separate audio cable (only if you want to broadcast audio from the computer).



Using an HDMI cable

Connect the projector to a computer with an HDMI cable.

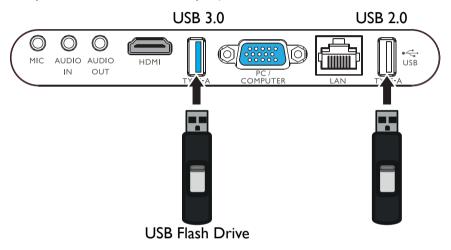




- Some computers feature HDMI ports that do not transmit audio, in such cases a separate audio cable must be connected to the projector.
- Many laptops do not turn on their external video ports when connected to a projector. Usually a key combination like Fn + F3 or CRT/LCD key turns the external display on/off. Locate a function key labeled CRT/LCD or a function key with a monitor symbol on the laptop. Press Fn and the labeled function key simultaneously. Refer to your laptop's documentation to discover your laptop's key combination.

Connecting a USB flash drive

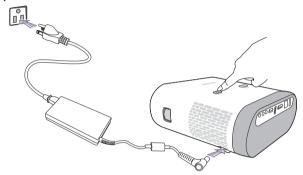
Connect a USB flash drive to one of the USB ports on the rear of the projector to view media files stored on the flash drive.



Operations

Starting up the projector

I. Plug the power cable into the projector and a power outlet. Turn on the power outlet switch (where fitted). The **POWER indicator light** on the projector lights orange after power has been applied.



- Please use the supplied power cable to avoid possible dangers such as electric shock and fire.
- 2. Connect any video equipment to the respective port on the rear of the projector. If you do not want to project video via such equipment but want to access the **BenQ Launcher**, you do not need to connect any video equipment.
- For more details on connection options, see Connection on page 26.
- 3. Press on the projector or on the remote control to start the projector. As soon as the lamp lights up, the **POWER indicator light** flashes green and stays green when the projector is on.
 - The fans starts operating, and a start-up image displays on the screen while it warms up, this process may take a few minutes. The projector does not respond to further commands while it is warming up.
- 4. If this is the first time you turn on the projector, the setup wizard appears to guide you through setting up the projector. If you have already done this, skip this step and move on to step 5.
 - Use the arrow keys (◄/►/▲/▼) on your remote control to move through the menu items.

• Use **OK** to confirm the selected menu item.



The Setup Wizard screenshots below are for reference only and may differ from the actual design.

Step I:

Specify **Projector Position**.





For more information about projector position, see Choosing a location on page 22.

Step 2:

Specify OSD Language.

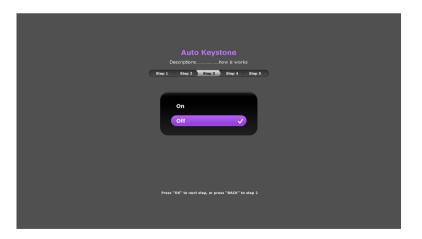




Available languages may vary by the product supplied for your region and may be updated without prior notice.

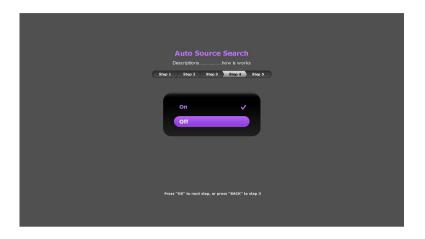
Step 3:

Specify Auto Keystone.



Step 4:

Specify **Auto Source**.

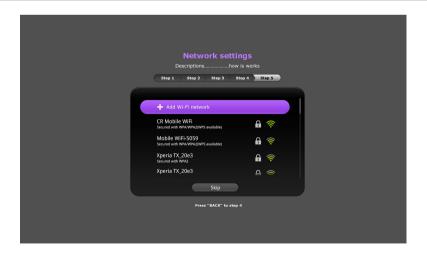


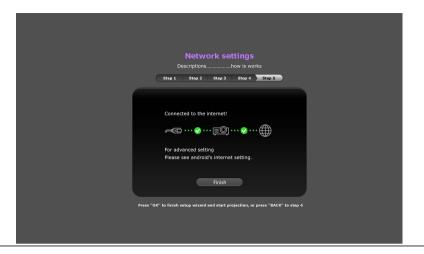
Step 5:

Specify the Network Settings (either connecting to a WLAN AP or using LAN connection).



You may need to enter a password if you choose to connect to a WLAN AP.







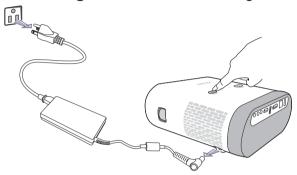
For more information about changing your network settings, see Choosing a location on page 22.

Now you've completed the initial setup.

- 5. Switch on the connected equipment.
- 6. The projector starts to search for available input signals. The current input signal being scanned displays on the screen. If the projector is unable to detect a valid signal, the projector will automatically open the **BenQ Launcher**. You may press = on your remote control to select your desired input signal.
- 7. If the horizontal frequency of the input source exceeds the range supported by the projector, the "No Signal" message displays on the screen. It will remain on-screen until you change the horizontal frequency of the input source to an appropriate one.

Shutting down the projector

- 1. Press 🕛 on the projector or 🕁 on your remote control. The projector displays a shutdown confirmation message.
- 2. Press of or of a second time. The **POWER indicator light** flashes orange and the fans run for about two minutes to cool the lamp. The projector does not respond to any commands during the cooling process.
- 3. When the cooling process ends, the **POWER indicator light** will show a solid orange.



If the projector will not be used for an extended period, unplug the power cable from the power outlet.

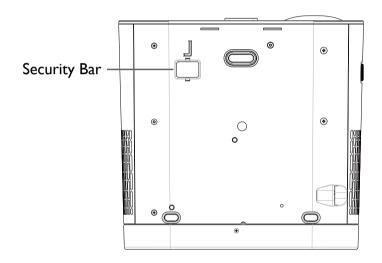


- Avoid turning on the projector immediately after turning it off as excessive heat may shorten lamp life.
- The actual lamp life may vary due to different environmental conditions and usage.

Securing the projector

Using the security bar

The projector has to be installed in a safe place to prevent theft. It has a security lock bar located at the bottom of the projector which you can use to secure the projector via a variety of purchasable self-locking cables.



Selecting an input source

The projector can be connected to multiple equipment at the same time. However, it only displays one full screen at a time. When starting up, the projector automatically searches for the available signals.

If you want the projector to always automatically search for signals:

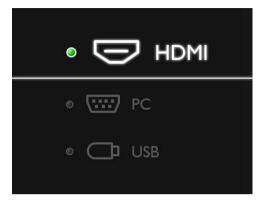
- Press the **MENU** button on your remote control.
- Under the OSD menu, go to the **Settings** menu, and then enable **Auto Source Search** (see Auto Source Search on page 58).

To select the video source:

1. Press

on your remote control to display the source selection bar.

□



2. Press ▲/▼ until your desired signal is selected and press OK.

Once detected, the selected source information displays on the screen for seconds. If there are multiple pieces of equipment connected to the projector, repeat steps I-2 to search for another signal.



The native display resolution of this projector is in a 16:10 aspect ratio. For best display picture results, you should select and use an input signal which outputs at this resolution. Any other resolutions will be scaled by the projector depending upon the Aspect Ratio setting, which may cause some image distortion or loss of picture clarity. See Aspect Ratio on page 56 for details.

Adjusting the projected image

Adjusting the projection angle

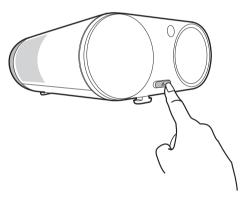
The projector is equipped with a quick-release adjuster foot and a rear adjuster foot. These adjusters change the image height and projection angle.

To adjust the projection angle:

- Press the quick-release button and lift the front of the projector. Once the image is positioned as desired, release the quick-release button to lock the foot in position.
- To retract the foot, hold up the projector while pressing the quick-release button, then slowly lower the projector.



If the screen and the projector are not perpendicular to each other, the projected image becomes vertical trapezoidal. To correct this, see Auto Keystone on page 58 for details.

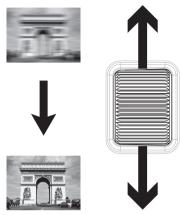




Do not look into the lens while the lamp is on. The strong light from the lamp may cause damage to your eyes.

Fine-tuning the image clarity

To sharpen the picture, rotate the focus ring on the projector.

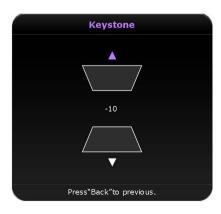


Correcting keystone

Keystoning refers to the situation where the projected image is noticeably wider at either the top or bottom. It occurs when the projector is not perpendicular to the screen.

You may correct this in the following way.

- Using the OSD settings menu
 - Select **Keystone**.





- To correct keystoning at the top of the image, use ▲ on your remote control.
- To correct keystoning at the bottom of the image, use ▼ on your remote control.
- When done, press BACK to save your changes and exit.



You may only make these adjustments if Auto Keystone is disabled in the Setting menu, see Auto Keystone on page 58 for details.

The Bluetooth speaker

Once the projector is properly connected to a power source and on standby mode you can use the speakers located at the rear of the projector to wirelessly broadcast audio from any Bluetooth-enabled mobile device.



The Bluetooth speaker and the projector cannot work simultaneously, in order to use the Bluetooth speaker the projector must be on standby mode.

Pairing with the Bluetooth speaker

Pairing is the process by which your mobile device creates a connection to the Bluetooth speaker for the first time. Once both devices have been successfully paired each device will have the corresponding device's pairing information stored internally and both will be able to connect automatically when they are within ~10 meter range of each other and Bluetooth is enabled on both devices.

To pair your mobile device to the Bluetooth speaker:

1. Press the Bluetooth button on the top of the projector.



If your projector is on when you press the Bluetooth button, a prompt will display asking you to confirm whether or not you want to activate the Bluetooth speaker and put the projector on standby, confirm this selection. After confirming the selection your projector will automatically be placed on standby.

- 2. The LED indicator on the Bluetooth button will begin alternating between blue and orange flashes indicating that it is searching for nearby Bluetooth devices.
- 3. Enable Bluetooth on your mobile device and select your projector in the list of available Bluetooth connections.
- 4. The LED indicator on the Bluetooth button will light up blue indicating that your mobile device and the projector's Bluetooth speaker have successfully paired and connected.
- 5. When your mobile device and the projector's speaker have successfully connected, you can broadcast audio media from your mobile device via the Bluetooth speaker, the LED indicator on the Bluetooth button will breathe blue indicating that the Bluetooth speaker is in operation.

Once you have successfully paired your mobile device with the Bluetooth speaker, pairing information will be stored on both devices and a connection will automatically be made when Bluetooth is enabled on both devices and both devices are within range of each other.



- If you press the Bluetooth button to activate the Bluetooth speaker on the projector and do not make a pairing/connection within 10 minutes, the LED indicator on the Bluetooth button will light up orange, indicating that the Bluetooth speaker is has failed to connect. Press the Bluetooth button again to re-activate the Bluetooth speaker.
- If your mobile device has successfully connected to the Bluetooth speaker but has moved out of range of the Bluetooth signal or there has been a disturbance in the signal, the LED indicator on the Bluetooth button will alternate between blue and orange flashes indicating that it is searching for available Bluetooth connections. Once a connection is available again the speaker will automatically connect with the device.

Ending a Bluetooth connection

In cases where you want to disconnect a mobile device from the Bluetooth speaker but keep Bluetooth on, press the Bluetooth button on the top of the projector twice. After ending the Bluetooth connection, the LED indicator on Bluetooth button will alternate between blue and orange indicating that it is searching for nearby Bluetooth devices. In this instance you can create a connection between the speaker and another mobile device.

Deactivating the Bluetooth speaker

To deactivate the Bluetooth speaker and place Bluetooth on standby mode press and hold the Bluetooth button for over a second. Once you release the button, the LED indicator on the Bluetooth button will turn off indicating that it is in standby mode. At this point you may use the projection function on the projector.

BenQ Launcher

BenQ Launcher is a multimedia platform that integrates various applications ranging from entertainment, education, games, online shopping, TV, and other practical functions that caters to your everyday needs.



Under BenQ Launcher mode, please use your remote control or an optional wireless keyboard/mouse for operating BenQ Launcher functions. The projector's control panel keys are limited to control projector functions.

Operating under the **BenQ Launcher** mode

Accessing the **BenQ Launcher** main page

When the projector is not projecting an image from a connected source be in **BenQ Launcher** mode by default. If the projector is projecting a source you can return to **BenQ Launcher** mode by pressing ω on your remote control.





Actual screen may vary based on your BenQ Launcher firmware version.

Using the **BenQ Launcher** applications



Before you start using BenQ Launcher applications, make sure you are connected to the Internet via a wired or wireless connection. See Using the All Apps page on page 49 for connection instructions.

The main menu of the **BenQ Launcher** mode features four main sections.

- Streaming Video section Shortcuts to direct streaming of Teleplay shows, Movies, or Cartoons.
- Featured Apps section A rotating selection of specially featured apps BenQ selects for users of the projector.
- **System section** A group of apps that help you configure the **BenQ Launcher**, and access more apps from the **BenQ Launcher**. They include the following menus:
 - App Market A marketplace which allows you to download and install various apps for the projector.
 - **Settings** Basic settings for the projector and **BenQ Launcher**. See the Using the BenQ Launcher Settings page on page 47 for more details.
 - All Apps A menu of all apps installed on the projector.
- App Shortcuts section A group of shortcuts to apps installed on the projector. See Adding/Removing app shortcuts on page 49 for more details.

Navigating the **BenQ Launcher**:

- 1. From the **BenQ Launcher** main menu, press $\blacktriangleleft/\triangleright/\blacktriangle/\blacktriangledown$ on your remote control to select the desired service and press **OK**.
- 2. Follow on screen instructions for further operations.

Accessing the **BenQ Launcher** menus

Within the **BenQ Launcher** mode there are multiple menus that can be accessed pressing $\triangleleft/\triangleright/\triangle/\blacktriangledown$ on your remote control from the main menu.

Using the **Notification** menu and **Clean Tool** function

Press ▲ twice on your remote control from the main menu to choose either the **Notification** menu or **Clean Tool** function and press **OK** to enter the menu.



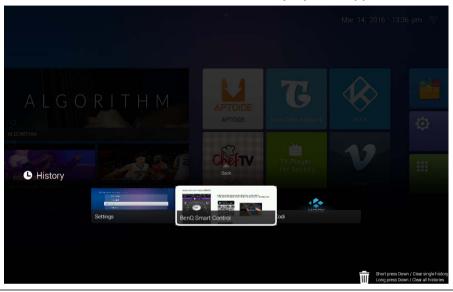


Actual screen may vary based on your BenQ Launcher firmware version.

- Notification Select this menu to view any app or system related messages for the projector.
- Clean Tool Select this function to clear the memory cache for the projector, which speeds up the performance of the BenQ Launcher.

Using the **History** menu

Press ▼ twice on your remote control from the main menu to view a list of recently opened apps.





Actual screen may vary based on your BenQ Launcher firmware version.

To re-open an app from the **History** menu use $\blacktriangleleft/\triangleright$ on your remote control to navigate to the app you want to re-open, and then press **OK** to re-open that app.

To clear an app from the **History** menu use **◄**/► on your remote control to navigate to the app you want to clear, and then press **▼** to clear that app from the History menu, you can also press and hold **▼** to clear all apps from the **History** menu.

Using the input source menu

Press ◀ on your remote control from the main menu to access the input source menu. See Selecting an input source on page 37 for more details on input sources.

Using the **BenQ Launcher Settings** page

The Settings page for the BenQ Launcher offers a set of configurations that allow you to make adjustments to the BenQ Launcher environment.





Actual screen may vary based on your BenQ Launcher firmware version.

BenQ Launcher Settings overview

Submenu	Functions and Descriptions					
	Allows you to:					
	Connect to the Internet via an Ethernet connection.					
Internet	• Connect to the Internet via a wireless connection. See Using the All Apps page on page 49 for more details.					
	Test the speed of your Internet connection.					
	Perform Network diagnostic.					

Submenu	Functions and Descriptions				
Mirror	Allows you show the connected smart device's screen from the projector. To perform the screen mirroring function, follows the connected device's user manual.				
	Allows you to:				
	Change the language for the projector.				
	Change the language input type.				
General	Change the wallpaper.				
Settings	Change the name for the projector.				
	The name for the projector is the name that displays when pairing a Bluetooth device to the projector for use of the Bluetooth speakers.				
	Change the location where installed applications are stored.				
	Allows you to:				
	Manage the apps installed on the projector.				
	Upgrade the system to the latest version via the Internet or the connected media flash drive.				
	For each system upgrade, the system will send a notice message to remind all users to undergo system upgrade. Make sure you have stable wireless connection during system upgrades.				
	View the following system information:				
System	Device ID				
Information	Device Name				
	Device Model				
	Build number				
	View operation instructions, such FAQ and user manual				
	Complete a factory data reset.				
	When you perform a factory data reset all the data stored in your projector will be deleted including apps, and media files. The settings for the projector will also revert back to the factory default settings.				

Using the All Apps page

The **All Apps** page in the system section of the main page allows you view and launch all apps installed on the projector.

To open an app:

1. Press $\blacktriangleleft/\triangleright/\blacktriangle/\blacktriangledown$ on your remote control to select the App you want to launch and press **OK** to launch.

Adding/Removing app shortcuts

To add an app to the App Shortcuts section of the main page:

- 1. Select the + box from the App Shortcuts section on the main page, a menu of all the apps installed on your projector will be displayed.
- 2. From the list of apps press **OK** on your remote control to check the box for the apps you want to add to the App Shortcuts section, or press **OK** on your remote control un-check the box for the apps you want to remove from the App Shortcuts section.
- 3. Press \preceq to confirm your selections and return to the **BenQ Launcher** main page.

Changing network settings

The **BenQ Launcher** allows you to change your wireless connection settings via the **WLAN Settings** menu within the **Internet** menu, which can be accessed by selecting the **Settings** menu from the System section in the main menu.

To change or connect to the Internet via Wireless LAN:

- I. Ensure WLAN is enabled in the WLAN field.
- Press ▲/▼ on your remote control to select the desired SSID for the Wireless AP you want to connect to and press OK.
- 3. When connecting to an SSID:
 - If you chose a secured SSID for the first time, a window appears to prompt you to enter the appropriate password. Press
 ✓ If you chose a secured SSID for the first time, a window appears to prompt you to enter the appropriate password. Press
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The password will be stored in the projector's memory. In the future, if you select the same SSID again, you will not be prompted to enter a password unless you delete the SSID from the projector's memory.

Inputting text

Various menus within the **BenQ Launcher** may require that you input text. To input text in a text field:

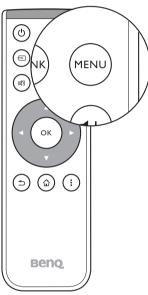
- I. Select the text field where you want to input text.
- 2. Press **OK** on your remote control, a full alphanumeric keyboard will appear on screen.
- 3. Press **<**/▶/▲/▼ on your remote control to navigate the keyboard, and press **OK** to select the letter/key/symbol you want to enter into the text field.
- 4. Press \Rightarrow at anytime to exit out of the keyboard.

Navigating the OSD menus

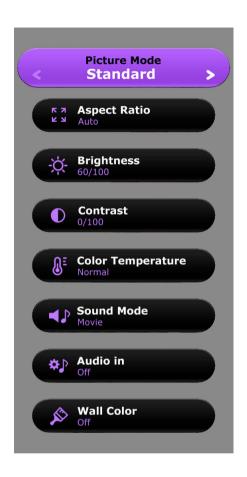
About the OSD menus

To let you make various adjustments or settings on the projector and the projected image, the projector provides a multilingual On-Screen Display (OSD) menus, which contains primary menu functions. (See Using the OSD menu on page 53)

To access the OSD menu, press **MENU** on your remote control.



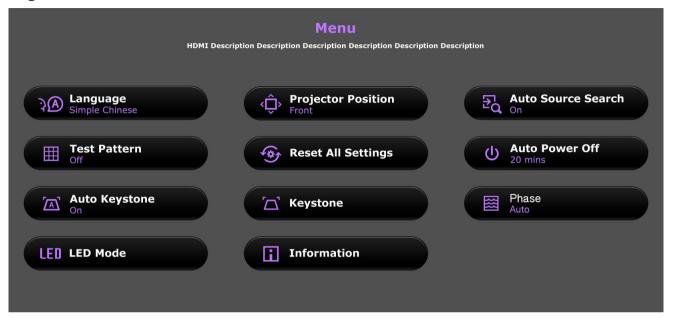
The following is the OSD menu:





Use the arrow keys ($\blacktriangleleft/\triangleright/\blacktriangle/\blacktriangledown$) on your remote control to move through the menu items, and use OK to confirm the selected menu item.

The following is the **Settings** menu of the OSD menu:





When selecting items within the Setting menu press OK, and then $(\blacktriangleleft/\blacktriangleright/)$ to toggle through the options. Press \circlearrowleft when you want to confirm your selection and return to navigating the Settings menu.

Using the OSD menu

The OSD menu provides primary menu functions. Available menu items may vary depending on the connected video sources or specified settings. Menu options that are not available will become grayed out.

To access the OSD menu, press **MENU** on your remote control.

- Use the arrow keys (◄/►/▲/▼) to move through the menu items.
- Use **OK** to confirm the selected menu item.



Certain menu items may appear only when input signals are connected and may not appear when no input signals are connected.

Menu	Submenus and descriptions					
		t picture mode to suit your operating environment and input signal picture type. cure modes are described as below:				
	Bright	Maximizes the brightness of the projected image. This mode is suitable for environments where extra-high brightness is required, such as using the projector in well lit rooms.				
Picture Mode	Vivid	Being slightly brighter than Cinema mode, it is suitable for playing movies in rooms where there is a small amount of ambient light, eg. your bedroom.				
	Game	Picture settings appropriate for playing video games.				
	Cinema	Well-balanced color saturation and contrast with a low brightness level, this is most suitable for enjoying movies in a totally dark environment (as you would find in a commercial cinema).				
	User	Recalls the customized settings.				
	Adjusts the brightness of the picture. When adjusting this control the black areas of the picture appear just as black and details in the dark areas are visible. The higher the value the brighter the picture, while the lower the value, the darker the picture.					
Brightness		50				
	•	gree of difference between dark and light in the picture. After adjusting the Brightness value, adjust Contrast white level. The higher the value the greater the contrast.				
Contrast		50				
Color	setting to the r	or saturation level the amount of each color in a video picture. Lower settings produce less saturated colors; ninimum value makes the image black and white. ting is too high, colors on the image will be overpowering, which makes the image unrealistic.				

Menu	Submenus and descriptions				
	The options av	ailable for color temperature* settings vary according to the connected input signal.			
Color	There are many different shades that are considered to be "white" for various purposes. One of the common methods of representing white color is known as the "color temperature". A white color with a low color temperature appears to be reddish white. A white color with a high color temperature appears to have more blue in it.				
Temperature	Cool	Makes images appear bluish white.			
	Normal	Maintains the normal colorings for white.			
	Warm	Makes images appear reddish white.			
Sound Mode	Selects a sound effect mode to your preference. The following preset sound modes are provided: Cinema, Music, and Game.				

Menu		Submenus and descriptions				
Aspect Ratio	pictures in a d	play resolution of this projector is in a 16:10 aspect ration. However you may use this function to display projected ifferent aspect ration if illustrations, the black portions are inactive areas and the white portions are active areas.				
	Auto	• Scales a picture proportionally to fit the projector's native resolution in its horizontal and vertical width. This makes the most use of the screen and maintains the aspect ratio of a picture.				
	Real	The image is projected as its original resolution, and resized to fit within the display area. For input signals with lower resolutions, the projected image will display smaller than if resized to full screen. You could move the projector towards the screen to increase the image size if necessary. You may also need to refocus the projector after making these adjustments.				
	4:3	Scales the picture so that it is displayed in the center of the screen with a 4:3 aspect ratio.				
	16:9	Scales the picture so that it is displayed in the center of the screen with a 16:9 aspect ratio.				
	16:10	Scales the picture so that it is displayed in the center of the screen with a 16:10 aspect ratio.				
		16:10 picture				

Menu	Submenus and descriptions					
	Selects the audio input source for the projector. The following Audio Input Source options are provided.					
Audio Input Source	LINE IN Selects the audio device that is connected via the AUDIO IN jack at the rear of the projector input source.					
	MIC IN	Selects the microphone that is connected via the MIC IN jack at the rear of the projector as the audio input source.				
Wall Color	Adjusts the color settings of the image to suit the color of the wall on which the image is projected. The following Wall Color options are provided: Off, Light Yellow, Light Green, Blue, Pink, and Blackground.					
3D	This projector supports playing three-dimensional (3D) content transferred through your 3D-compatible video devices an contents, such as game consoles (with 3D game discs), 3D Blu-ray players (with 3D Blu-ray discs), 3D TV (with 3D channel so on. After you have connected the 3D video devices to the projector, wear the BenQ 3D glasses and make sure the power of view 3D contents. When watching 3D contents: The image may seem misplaced, however, this is not a product malfunction. Take appropriate breaks when watching 3D content. Stop watching 3D content if you feel fatigue or discomfort. Keep a distance from the screen of about three times the effective height of the screen when watching 3D content. Children and people with a history of oversensitivity to light, heart problems, or have any other existing medical condit should be refrained from watching 3D content. The default setting is Auto and the projector automatically chooses an appropriate 3D format when detecting 3D content the projector cannot recognize the 3D format, manually choose a 3D mode according to your preference. When this function is enabled: The brightness level of the projected image decreases. The Picture Mode cannot be adjusted.					
Settings	When select	ing items within the Settings menu press OK , and then ($\blacktriangleleft/\blacktriangleright/$) to toggle through the options. Press \circlearrowleft when you want to confirm and return to navigating the Settings menu.				
	Language	Sets the language for the On-Screen Display (OSD) menus and the BenQ Launcher .				

Menu	Submenus and descriptions					
	Projector Position	The projector can be installed on in a high location or behind a screen. See Choosing a location on page 22 for details.				
	Auto Source Search	Sets whether the projector searches automatically for input sources. Select On to enable the projector to scan for input sources until it acquires a signal. If the function is set to Off , the projector selects the last used input source.				
	Test Pattern	Enable this function to display the grid test pattern, which helps you adjust the image size and focus so check if the projected image is free of distortion.				
	Reset All Settings Returns all settings to the factory preset values. The following settings will still remain: Keystone, Language and Projector Position.					
	Auto Power Off	Sets the time interval in which the projector will automatically power when inactive. The following Auto Power Off options are provided: Disable , 5 mins , 15 mins , and 20 mins .				
	Auto Keystone	Enable this function to allow the projector to automatically adjust the keystone settings when powered on. See Correcting keystone on page 40 for more details.				
	Keystone	Adjusts the keystone settings for the projected image. See Correcting keystone on page 40 for more details.				
		This function is only available when Auto Keystone is disabled.				
	Diverse	Adjusts the clock phase to reduce picture distortion.				
	Phase	This function is only available when PC is selected as the input source.				
	LED Mode	Selects the projector LED lamp power from the following modes. • Normal: Provides full lamp brightness. • Economic: Reduces system noise and power consumption by 30%. If the Economic mode is selected, the light output will be reduced and result in darker projected pictures.				

Menu	Submenus and descriptions				
		Displays the following information about your projector.			
		Source: Displays the current signal source.			
		Picture Mode: Displays the current Picture Mode.			
		Resolution: Displays the native resolution of the input source.			
	Information	Color System: Displays input system format.			
		• Equivalent Lamp Hour: Displays the number of hours the lamp has been used.			
		Firmware Version: Displays the firmware version of your projector.			
		Some information is given only when certain input sources are in use.			

Maintenance

Care of the projector

Your projector needs little maintenance. The only thing you have to do on a regular basis is keep the lens clean.

Never remove any parts of the projector. Contact your dealer or local customer service center if the projector fails to operate as expected.

Cleaning the lens

Clean the lens whenever you notice dirt or dust on the surface.

Before cleaning any part of the projector, turn it off using the proper shutdown procedure (see Shutting down the projector on page 36), unplug the power cable, and let it cool down completely.

- Use a canister of compressed air to remove dust.
- If there is dirt or smears, use lens-cleaning paper or moisten a soft cloth with lens cleaner and gently wipe the lens surface.
- Never use any type of abrasive pad, alkaline/acid cleaner, scouring powder, or volatile solvent, such as alcohol, benzene, thinner or insecticide.

 Using such materials or maintaining prolonged contact with rubber or vinyl materials may result in damage to the projector surface and cabinet material.



Never touch the lens with your finger or rub the lens with abrasive materials. Even paper towels can damage the lens coating. Only ever use a proper photographic lens brush, cloth, and cleaning solution. Do not attempt to clean the lens while the projector is switched on or is still hot from previous use.

Cleaning the projector case

Before cleaning any part of the projector, turn it off using the proper shutdown procedure (see Shutting down the projector on page 36), unplug the power cable, and let it cool down completely.

- To remove dirt or dust, wipe the case with a soft, dry, lint-free cloth.
- To remove stubborn dirt or stains, moisten a soft cloth with water and a neutral detergent. Then wipe the case.



Never use wax, alcohol, benzene, thinner or other chemical detergents. These can damage the case.

Storing the projector

To store the projector for an extended time:

- Make sure the temperature and humidity of the storage area are within the recommended range for the projector. Refer to Specifications or consult your dealer about the range.
- · Retract the adjuster feet.
- Remove the batteries from the remote control.
- Pack the projector in its original packing or equivalent.

Transporting the projector

It is recommended that you ship the projector with its original packing or equivalent.

LED Lamp information

Getting to know the lamp hour

When the projector is in operation, the duration (in hours) of lamp usage is automatically calculated by the built-in timer.

To obtain the lamp hour information:

- 1. Press **MENU** and then use the arrow keys $(\blacktriangleleft/\triangleright/\blacktriangle/\blacktriangledown)$ to go to **Settings > Information** and press **OK**.
- 2. The Equivalent Lamp Hour information displays.
- 3. Press BACK to exit.

Extending lamp life

The projection lamp is an 500AL LED bulb which features an lamp life far beyond traditional bulbs, yet it is still a consumable item. To keep the lamp life as long as possible, you can change the following settings via the OSD menu.

To access the OSD menu, see Using the OSD menu on page 53 for details.

Setting LED Mode

Setting the projector in Economic mode extends the lamp life.

LED mode	Description		
Normal	100% lamp brightness		
Economic	Economic mode dims the projector's LED lamp which will lower power consumption, extend the LED lamp life and reduce the projector's noise level. The reduced light output will result in darker projected pictures. If you set your projector to Economic mode choose Normal to return to the default normal mode.		

- 1. Select **MENU > Settings > LED Mode** and press **OK**.
- 2. Press $(\blacktriangleleft/\blacktriangleright)$ to move to your desired mode, and press **OK**.
- 3. When done, press to *⇒* your changes and exit.

Setting Auto Power Off

This function allows the projector to turn off automatically if no input source is detected after a set period of time.

- 1. Select MENU > Settings > Auto Power Off and press OK.
- 2. Press (◄/►) to select a time period. If the preset time lengths are not suitable for your presentation, select **Disable**, and the projector will not automatically shut down.
- 3. When done, press \Rightarrow to save your changes and exit.

Indicators

There are two indicators which show the status of the projector and the Bluetooth speaker. Check the following information about the indicator lights. If there is anything wrong, turn the projector off and contact your dealer.

• When the projector is in a normal state

Projector	U Bluetooth Speaker	TEMP	LED	Status & description	
Orange	Off	Off	Off	Projector and Bluetooth in stand-by mode	
Orange	Alternating Blue and Orange	Off	Off	 Projector is in stand-by mode Bluetooth is in search mode, or Bluetooth has lost connection and is in search mode 	
Orange	Orange	Off	Off	 Projector is in stand-by mode Bluetooth has been in search mode for over 10 minutes and has not made a connection 	
Orange	Blue	Off	Off	 Projector is in stand-by mode Bluetooth is connected	
Orange	Blue Breathing (I sec intervals)	Off	Off	 Projector is in stand-by mode Bluetooth speaker is operating	
Green Flashing	Off	Off	Off	 Projector is powering up Bluetooth is off	
Green	Off	Off	Off	 Projector is operating Bluetooth is off	
Orange Flashing	Off	Off	Off	Projector is powering-down and in cooling mode	

• When the projector is undergoing system updates or in an abnormal state

Projector	Bluetooth Speaker	TEMP	LED	Status & description
Red Flashing	Off	Red Flashing	Red Flashing	Projector is downloading a firmware update
Green	Off	Off	Red	Firmware is finished, once the indicators turn off the projector has returned to a normal state
Green	Off	Green	Red Flashing	Burn-in is OFF
Off	Off	Off	Red	The projector's lamp is not functioning properly
Red	Off	Red	Off	Fan I is not working properly
Red	Off	Red Flashing	Off	Fan 2 is not working properly
Green	Off	Red	Off	The projector's temperature is over the stage I limit
Green	Off	Red Flashing	Off	The projector's temperature sensor I is not working properly
Green Flashing	Off	Red	Off	The projector's temperature is over the stage 2 limit.
Green Flashing	Off	Red Flashing	Off	The projector's temperature sensor 2 is not working properly
Red Flashing	Off	Green	Off	The projector's temperature is over the stage 3 limit.
Red Flashing	Off	Green Flashing	Off	The projector's temperature sensor 3 is not working properly

Troubleshooting

Problem	Cause	Remedy	
The projector does not turn on.	There is no power from the power cable.	Plug the power cable into the AC inlet on the rear of the projector, and plug the power cable into to the power outlet. If the power outlet has a switch, make sure that it is switched on.	
	Attempting to turn the projector on again during the cooling process.	Wait until the cooling down process has completed.	
	The video source is not turned on or connected correctly.	Turn the video source on and check that the signal cable is connected correctly.	
No picture.	The projector is not correctly connected to the input source device.	Check the connection.	
	The input source has not been correctly selected.	Select the correct source with the 🖃 key on the remote control.	
Image is unstable.	The connection cables are not securely connected to the projector or the signal source.	Correctly connect the cables to the appropriate terminals.	
	The projection lens is not correctly focused.	Adjust the focus of the lens using the focus ring.	
Picture is blurred.	The projector and the screen are not aligned properly.	Adjust the projection angle and direction as well as the height of this projector if necessary.	
	The lens cover is still closed.	Remove the lens cover.	
	The batteries are out of power.	Replace both of the batteries with new ones.	
Remote control does not work correctly.	There is an obstacle between the remote control and the projector.	Remove the obstacle.	
	You are too far away from the projector.	Stand within 8 meters (26.2 feet) of the projector.	

Problem	Cause	Remedy	
3D content does not display correctly	The 3D glasses are out of battery.	Recharge the 3D glasses.	
	The settings in the 3D menu are not set correctly.	Correctly set the settings in the 3D menu.	
	Your Blu-ray Disc is not in 3D format.	Use a 3D Blu-ray Disc and try again.	
	The input source has not been correctly selected.	Select the correct source with the SOURCE key on the projector or remote control.	

Specifications

Projector specifications



All specifications are subject to change without notice.

Optical

Resolution

1280 (H) x 800 (V)

Display system

Mstar ARM A7 Quad-Core CPU

Lens F/Number

F = 1.6, f = 6.154 mm

Lamp Type

OSRAM PIW LED

Lamp Life (Normal/Economic)

20,000/30,000 hours



Lamp life results will vary depending on environmental conditions and usage.

Audio

Supported Audio (HDMI Mode)

- Supports LPCM, two audio channels
- Supported audio sampling rates: 32kHz, 44.1kHz, and 48kHz
- Supported audio bit rates: 16 bits, 20 bits, and 24 bits

Supported Audio (DVI/PC Mode)

Analog audio is supported through the PC audio input port

Electrical

Power supply

AC100-240V, 3.5 A, 50-60 Hz (Automatic)

Power consumption

75 W (Typical); < 0.5 W (Standby)

Mechanical

Weight

1.3 Kg (2.87 lbs)

Output terminals

Speaker

(Stereo) 5 watt x 2

Audio signal output

Audio jack x I

USB

USB port 2.0 Type-A x I

USB port 3.0 Type A x I



The USB ports only output power, which allows you to charge attached USB-enabled devices (i.e. a smartphone, tablet, etc.).

Control

IR receiver x 2

Input terminals

Computer input

D-Sub 15-pin (female) x I

Video signal input

SD/HDTV signal input

Digital - HDMI x I

Audio signal input

Audio in

PC audio jack x I

Microphone jack x I

USB

USB port 2.0 Type-A x I

USB port 3.0 Type A x I

Environmental Requirements

Operating temperature

0°C-40°C at sea level

Operating relative humidity

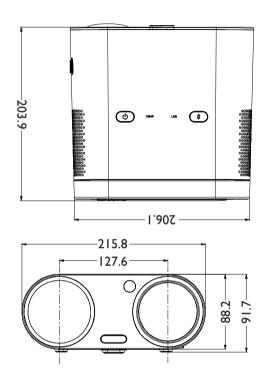
10%–90% (without condensation)

Operating altitude

0-1499 m at 0°C-35°C

Dimensions (with adjustment feet not extended)

 $215.63 \text{ mm} \times 201.7 \text{ mm} \times 93.16 \text{ mm} (W \times D \times H)$



Timing chart

Supported timing for video input

Timing	Resolution	H. Frequency (KHz)	V. Frequency (KHz)	Dot Clock Frequency (MHz)
480i****	720 (1440) x 480	15.73	59.95	27
480p****	720 x 480	31.47	59.94	27
576i	720 (1440) × 576	15.63	50	27
576p	720 × 576	31.25	50	27
720/50p**	1280 × 720	37.5	50	74.25
720/60p*	1280 x 720	45.00	60	74.25
I 080/24P**	1920×1080	27	24	74.25
I 080/25P	1920×1080	28.13	25	74.25
I 080/30P	1920×1080	33.75	30	74.25
I 080/50i****	1920×1080	28.13	50	74.25
I 080/60i****	1920×1080	33.75	60	74.25
1080/50p***	1920×1080	56.25	50	148.5
1080/60p***	1920×1080	67.5	60	148.5



^{*}Supported timing for 3D signal with Frame Packing, Top-Bottom format, Side-by-Side, and Frame Sequential format.

^{**}Supported timing for 3D signal with Frame Packing, Top-Bottom format, and Side-by-Side format.

^{***}Supported timing for 3D signal with Top-Bottom and Side-by-Side format.

^{*****}Supported timing for 3D signal with Frame Sequential format.

^{*****}Supported timing for 3D signal with Side-by-Side format.

Supported timing for PC input

Timing	Resolution	H. Frequency (KHz)	V. Frequency (KHz)	Dot Clock Frequency (MHz)
440 400	VGA_60	59.940	31.469	25.175
	VGA_72	72.809	37.861	31.500
640 × 480	VGA_75	75.000	37.500	31.500
	VGA_85	85.008	43.269	36.000
	SVGA_60	60.317	37.879	40.000
800 × 600	SVGA_72	72.188	48.077	50.000
600 X 600	SVGA_75	75.000	46.875	49.500
	SVGA_85	85.061	53.674	56.250
	XGA_60*	60.004	48.363	65.000
1024 × 768	XGA_70	70.069	56.476	75.000
1024 x 766	XGA_75	75.029	60.023	78.750
	XGA_85	84.997	68.667	94.500
1152 x 864	1152 x 864_75	75.00	67.500	108.000
1280 × 720	1280 x 720_60*	60	45.000	74.250
1280 x 720	1280 x 720_120	120	90.000	148.500
1280 x 768	1280 x 768_60	59.870	47.776	79.5
1280 × 800	WXGA_60*	59.810	49.702	83.500
	WXGA_75	74.934	62.795	106.500
	WXGA_85	84.880	71.554	122.500

Timing	Resolution	H. Frequency (KHz)	V. Frequency (KHz)	Dot Clock Frequency (MHz)
1280 × 1024	SXGA_60	60.020	63.981	108.000
1200 X 102 1	SXGA_75	75.025	79.976	135.000
1360 × 768	1360 x 768_60	60.015	47.712	85.500
1440 × 900	WXGA+_60	59.887	55.935	106.500
1400 × 1050	SXGA+_60	59.978	65.317	121.750
1600 x 1200	UXGA	60.000	75.000	162.000
1680 × 1050	1680 x 1050_60	59.954	65.290	146.250
640 x 480@67Hz	MAC13	66.667	35.000	30.240
832 x 624@75Hz	MAC16	74.546	49.722	57.280
1024 x 768@75Hz	MAC19	74.93	60.241	80.000
1152 x 870@75Hz	MAC21	75.06	68.68	100.00
1920 x 1080@60Hz	1920 × 1080_60 (Reduce Blanking)	60	67.5	148.5



The timings showing above may not be supported for due to EDID file and VGA graphic card limitations. It is possible that some timings cannot be chosen.

Supported file formats

File type	File extension	Description
	Adobe PDF I.0 - I.4 (.pdf)	
	MS PowerPoint 97 - 2010 (.ppt, .pptx)	
Documents	MS Excel 95 - 2010, Office XP (.xls, .xlsx)	
	MS Word 95 - 2010, Office XP (.doc, .docx)	
Photos	JPG (.jpg, .jpeg), BMP (.bmp)	
Music	MP3, MP2, MP1, OGG, AAC, WAV	
Video	AVI (XVID, MJPEG)	
	DVIX (MJPEG, XVID)	
	DAT (MPEGI)	
	MPG (MPEGI)	
	MPEG (MPEG I	
Subtitles	SRT (.srt)	 Subtitle files must be in the same directory as the video files. The name of subtitle files must be the same as the name of the corresponding video files. SRT only supports UTF (unicode 8).



Bit rate range: If the peak bit rate of a video file is larger than 10MB, it might cause video playback lag.